

(19)世界知的所有権機関  
国際事務局(43)国際公開日  
2003年5月30日 (30.05.2003)

PCT

(10)国際公開番号  
WO 03/044330 A1

(51)国際特許分類:

F01L 1/18

(81)指定国(国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EF, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21)国際出願番号:

PCT/JP02/12061

(22)国際出願日: 2002年11月19日 (19.11.2002)

(25)国際出願の言語:

日本語

(26)国際公開の言語:

日本語

(30)優先権データ:

特願2001-356077

2001年11月21日 (21.11.2001) JP

(71)出願人(米国を除く全ての指定国について): 日本精工株式会社 (NSK LTD.) [JP/JP]; 〒141-8560 東京都品川区大崎一丁目6番3号 Tokyo (JP).

(84)指定国(広域): ARIPO 特許 (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), ヨーラシア特許 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッパ特許 (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI 特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

添付公開書類:  
— 國際調査報告書

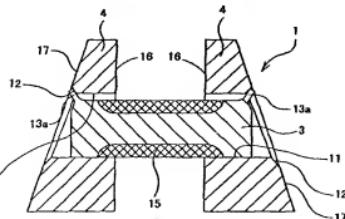
(72)発明者: および

(75)発明者(出願人(米国についてのみ)): 清水屋 雅由 (SHIMIZUYA, Masayo) [JP/JP]; 〒251-0021 神奈川県藤沢市鶴沼神明1丁目5番50号 日本精工株式会社内 Kanagawa (JP).

(74)代理人: 鶴田 朝雄, 外 (KAMODA, Asao et al.); 〒105-0003 東京都港区西新橋2丁目15番17号 レインボービル8階 Tokyo (JP).

(54)Title: CAM FOLLOWER WITH SHEET METAL ROCKER ARM

(54)発明の名称: 板金製ロッカーアームを備えたカムフォロア



and rattling can be prevented from occurring on the both end support parts of the pivot shaft (3) against the pair of side wall parts (4) even if the cam follower is used for a long period.

(57)Abstract: A cam follower with a sheet metal rocker arm, wherein the outside faces (17) of a pair of side wall parts (4) are not formed parallel with each other since the amounts of elongation thereof at the time of elastic deformation are different from each other, when in use, a load is applied to a pivot shaft (3) in a direction from a side on which an interval between the outside faces (17) is small to a side on which the interval is large, and crimped parts (13a) formed at the outer peripheral edge parts on both end faces of the pivot shaft (3) are formed on the half parts thereof on the side where the interval between the outside faces (17) is small, whereby the both end part outer peripheral surfaces of the pivot shaft (3) are allowed to abut on the inner peripheral surface of a through hole (11) on the side for pivotally supporting the load, and the load can be sufficiently pivotally supported on the contact surface, even if the cam follower is used for a long period.

WO 03/044330 A1

/統葉有/

1 / 4

図 1

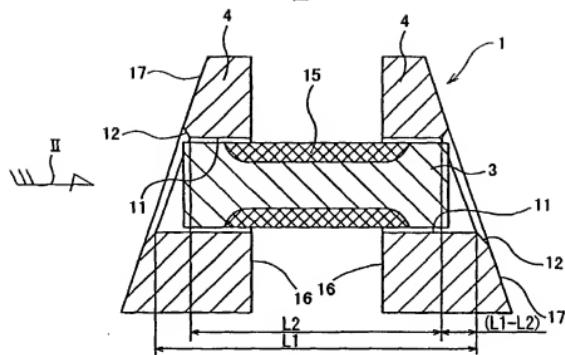


図 2

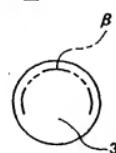
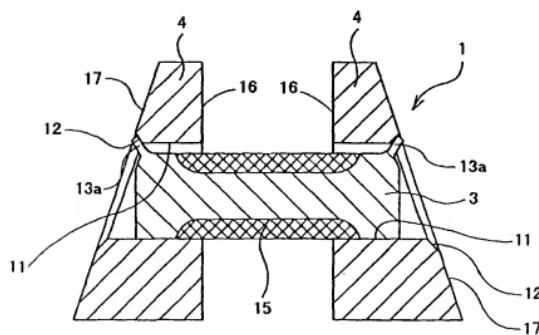


図 3



2 / 4

図4

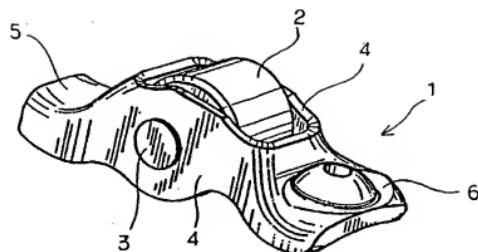


図5

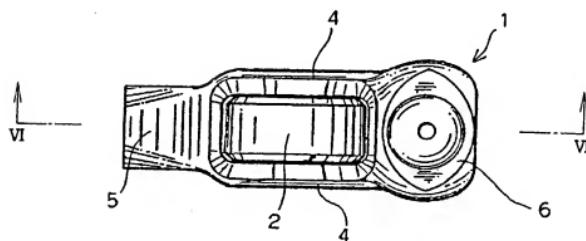
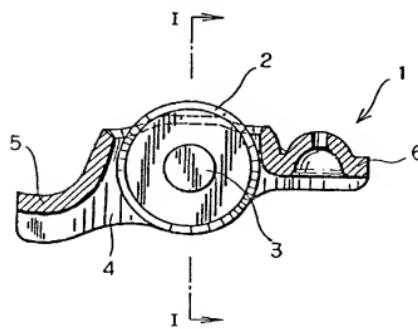
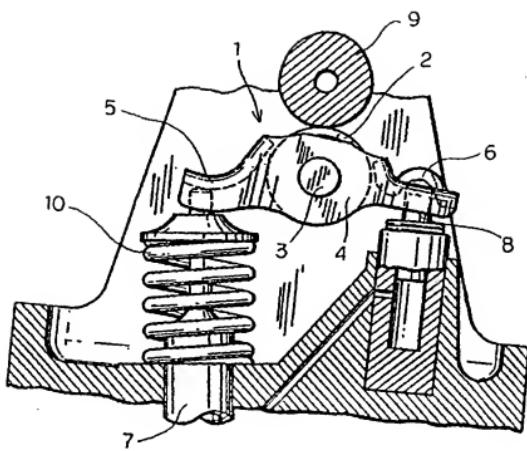


図6



3 / 4

図7



4 / 4

図 8

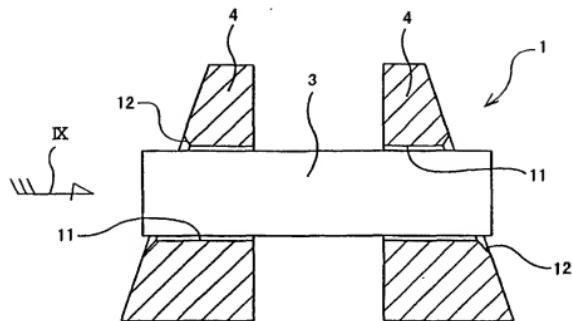


図 9

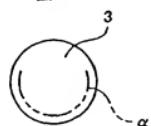


図 10

